


**Process for the preparation of purified alpha-1-fetoprotein and its application**

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**Abstract of EP0001812**

Purified alpha 1-fetoprotein is prepared in a process using the following stages: a) a sample of a material from a biological source which is known to contain alpha 1-fetoprotein is buffered to a pH of about 7, b) the buffered sample is subjected to affinity chromatography by passing through a column with an antibody which is specific for alpha 1-fetoprotein and which is immovably anchored on a solid support, and eluting the bound alpha 1-fetoprotein by treatment of the column with a suitable desorbent, c) virtually all the albumin present in the eluate from stage b) is removed by adsorption chromatography by passing through a column which contains an immobilised reactive dye adsorber, d) the non-adsorbed solution containing alpha 1-fetoprotein from stage c) is dialysed, e) the dialysed solution from stage d) is lyophilised, f) the powder formed in stage e) is dissolved in a suitable buffer and the resulting solution is subjected to polyacrylamide gel electrophoresis. The invention also relates to the radioiodinated alpha 1-fetoprotein prepared in this way, and to the use of the alpha 1-fetoprotein for preparing reagents for a radioimmunoassay for determining alpha 1-fetoproteins, to the radioimmunoassay itself and to an appropriate reagent kit.

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